NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD SOUTH DAKOTA SUPPLEMENTS ITALICIZED

HEDGEROW PLANTING

(ft.) CODE 422

DEFINITION

Establishing a living fence of shrubs or trees in, across, or around a field.

PURPOSE

To provide one or more of the following functions:

Delineate field boundaries or serve as fences;

Establish contour guidelines;

Provide wildlife food, cover, and corridors;

Provide screens;

Improve the landscape appearance; or

Serve as a living fence.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies in, across, or around cropland, hayland, pastureland, or other land except forest.

CRITERIA

General Criteria Applicable to all Purposes.

Plants listed by the state as noxious weeds or as exotic invasive species will not be used in a hedgerow planting.

Species used must be suitable and adapted to the soils, climate, and purpose.

Woody vegetation must be included in a planting; herbaceous species may be added to the mixture of shrubs and trees to achieve the best results for some purposes.

Species will be selected using the Windbreak Suitability Groups located in Section II -Windbreak Interpretations in the South Dakota Technical Guide (SDTG) for adaption to specific soils and climate. Combinations of species will be developed according to the guide to compatible species included in Windbreak/Shelterbelt Establishment (380).

Minimum width of a hedgerow will be two rows of trees and/or shrubs.

Hedgerows will be protected from grazing and trampling.

Weeds or competing vegetation will be controlled until the hedgerow is established.

Plantings along roads will be located in conformance with state, county, and local regulations.

Establishment of Hedgerows

Any of the following techniques may be used to plant a hedgerow:

Windbreak/Shelterbelt guidance:

Follow guidance in practice Windbreak/Shelterbelt Establishment (380) for spacing within the rows, site preparation, requirements for planting stock, and requirements for planting.

Scalp planting:

Scalp planting may be accomplished with a scalp planting machine, or by planting with a regular tree planter within a plowed furrow;

Scalp or furrow width - approximately 10 inches;

Scalp or furrow depth - three to four inches;

Plantings on land with slopes greater than two percent should be on contour lines;

The furrow slice from scalping or plowing should be laid on the downslope side;

Scalp plantings will not be made in heavy sod, unless the grass has been controlled either chemically or mechanically.

Hand planting using rooted stock:

Clear a site 18 to 30 inches in diameter, and 3 to 4 inches deep;

Place cleared sod and material on the down slope side of the clearing;

Plant the rooted tree or shrub in the center of the clearing, using a tree planting bar, tile spade, or pointed clay shovel.

Hand planting on wet soil using willow or cottonwood cuttings:

Planting may be accomplished using hand planting equipment or by directly inserting the cutting in the soil. The planting site does not need to be cleared of vegetation.

Additional Criteria to Serve as Fences or Field Boundaries

Plant a predominance of trees and shrubs that are thorny or spiny or have dense growth.

Additional Criteria to Establish Contour Guidelines

The grade of the hedgerow will be aligned closely to the contour of the field.

Additional Criteria to Provide Wildlife Food, Cover, and Corridors

Plants selected shall benefit wildlife, as either food or cover. Include a variety of fruit and nut producing trees and shrubs.

At least two species of woody plants will be established

Additional Criteria to Provide Screens

For visual screens, place the planting as close to the designated observation point as possible. For noise barriers place the planting as close to the noise source as possible.

Additional Criteria to Improve the Landscape

Plants will be selected based upon their aesthetic values; colorful foliage, flowers, fruits, and plant shape.

The hedgerow design shall meet the aesthetic objectives of the landowner. Plants shall be selected based upon the landowners preferences for color, texture, and growth habit.

CONSIDERATIONS:

Consider the multiple benefits that hedgerows provide during planning.

Hedgerows enhance aesthetics around fields, can help reduce erosion from wind and water, can assist in sediment trapping, and can provide a harbor for beneficial and/or pest insects.

Hedgerows can provide linkages for fragmented habitats as well as travel lanes for a variety of wildlife species.

The use of native species should be encouraged for all hedgerows.

Avoid use of invasive species such as European buckthorn.

Use of evergreen species will enhance the year round function of the hedgerow especially for screening and wildlife cover.

Wider hedgerows may be beneficial for some wildlife species and purposes.

The addition of nest or bat boxes, particularly during the early years, can provide a needed habitat for cavity-nesting birds or animals.

Consider the negative impacts of adding trees to prairie or grassland landscapes. Impacts from nest parasites such as the cow bird may outweigh many benefits of the hedgerow.

Weed infestations may proliferate along hedgerows.

Use of low growing species is recommended near roads or railroad intersections to avoid creating visual blocks or other hazards.

Consider the prevailing winds and snow drift patterns when planning a hedgerow.

Supplemental watering may be desirable to ensure adequate survival.

Periodic applications of nutrients may be needed to maintain plant vigor.

PLANS AND SPECIFICATIONS:

Plans and specifications for hedgerows will be in keeping with this standard and will describe the requirements for applying this practice to achieve its intended purpose. Specifications for this practice will be prepared for each site. Specifications will be recorded using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other documentation.

OPERATION AND MAINTENANCE:

The client will receive a plan or specifications describing the following management and corrective actions that are required for the successful management of the hedgerow including:

Control of competing vegetation until woody plants are established.

Replanting and/or renovation. To protect wildlife populations using the hedgerow, renovate 1/3 of the hedgerow at a time.

Control all noxious and invasive species.

Grazing will be excluded from hedgerows except when crop aftermath is grazed.

Encroachment can be controlled as needed by pruning to the desired width during winter or mowing to the edge of the hedgerow after July 15.

Herbicides may be used to control unwanted vegetation to maintain the planting. Herbicides will be applied in accordance with, labels and all federal, state, and local regulations. Caution is necessary so as not to destroy the planting.